



COTH-P01-002 SEQUENCE LISTING
SEQUENCE LISTING

<110> CHAN, JOHN
BAYNES, BRIAN
ZHANG, SHENGSHENG

<120> METHODS OF ENGINEERING SPATIALLY CONSERVED MOTIFS IN POLYPEPTIDES

<130> COTH-P01-002

<140> 10/676,873

<141> 2003-09-30

<150> 60/414,688

<151> 2002-09-30

<160> 4

<170> PatentIn version 3.2

<210> 1

<211> 474

<212> DNA

<213> TNF alpha chain b mutation

<400> 1

```
gtcagatcat cttctcgaac cccgagtgac aagcctgtag cccatgttgt agcaaaccct      60
caagctgagg ggcagctcca gtggctgaac cgccgggcca atgccctcct ggccaatggc      120
gtggagctga gagataacca gctggtggtg ccatcagagg gcctgtacct catctactcc      180
caggtcctct tcaagggcca aggctgcccc tccacccatg tgctcctcac ccacaccatc      240
agccgcatcg ccgtctccta ccagaccaag gtcaacctcc tctctgccat caagagcccc      300
tgccagaggg agaccccaga gggggctgag gccaagccct ggtatgagcc catcgatctg      360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggcccgac      420
tatctcgact ttgccgagtc tgggcaggtc tactttggga tcattgccct gtga          474
```

<210> 2

<211> 157

<212> PRT

<213> TNF alpha protein

<400> 2

```
Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala Gly Val
1          5          10          15
```

```
Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
20          25          30
```

```
Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
35          40          45
```

```
Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe
Page 1
```

COTH-P01-002 SEQUENCE LISTING

50

55

60

Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
65 70 75 80

Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
85 90 95

Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
100 105 110

Pro Gln Tyr Glu Pro Ile Asp Leu Gly Gly Val Phe Gln Leu Glu Lys
115 120 125

Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Leu Phe
130 135 140

Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
145 150 155

<210> 3
<211> 474
<212> DNA
<213> TNF alpha chain c mutation

<400> 3
gtcagatcat cttctcgaac cccgagtgac aagcctgtag cccatggtgt agcaaaccct 60
caagctgagg ggcagctcca gtggctgaac cgccgggcca atgccctcct ggccaatggc 120
gtggagctga gagataacca gctggtggtg ccatcagagg gcctgtacct catcagttcc 180
caggtcctct tcaagggccca aggctgcccc tccacccatg tgctcctcac ccacaccatc 240
agccgcatcg ccgtctccta ccagaccaag gtcaacctcc tctctgccat caagagcccc 300
tgccagaggg agaccccaga gggggctgag gccaagccct ggtatgagcc catccatctg 360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggcccgac 420
tatctcgact ttgccgagtc tgggcaggtc tactttggga tcattgccct gtga 474

<210> 4
<211> 157
<212> PRT
<213> TNF alpha protein sequence chain c

<400> 4

Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val
1 5 10 15

Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
20 25 30

COTH-P01-002 SEQUENCE LISTING

Ala	Asn	Ala	Leu	Leu	Ala	Asn	Gly	Val	Glu	Leu	Arg	Asp	Asn	Gln	Leu
	35						40					45			
Val	Val	Pro	Ser	Glu	Gly	Leu	Tyr	Leu	Ile	Ser	Ser	Gln	Val	Leu	Phe
	50					55					60				
Lys	Gly	Gln	Gly	Cys	Pro	Ser	Thr	His	Val	Leu	Leu	Thr	His	Thr	Ile
65					70					75					80
Ser	Arg	Ile	Ala	Val	Ser	Tyr	Gln	Thr	Lys	Val	Asn	Leu	Leu	Ser	Ala
				85					90					95	
Ile	Lys	Ser	Pro	Cys	Gln	Arg	Glu	Thr	Pro	Glu	Gly	Ala	Glu	Ala	Lys
			100					105					110		
Pro	Gln	Tyr	Glu	Pro	Ile	His	Leu	Gly	Gly	Val	Phe	Gln	Leu	Glu	Lys
		115					120					125			
Gly	Asp	Arg	Leu	Ser	Ala	Glu	Ile	Asn	Arg	Pro	Asp	Tyr	Leu	Leu	Phe
	130					135					140				
Ala	Glu	Ser	Gly	Gln	Val	Tyr	Phe	Gly	Ile	Ile	Ala	Leu			
145					150					155					